

## ATTACHMENT

### Areas of Mutual Interest for Developing Activities in Technical Cooperation

The present document supplements the **Memorandum of Understanding for Technical Cooperation in the Areas of Renewable Energy Sources, Environmental Improvement, Climate Change and Biodiversity, between the State of California, United States of America and the State of São Paulo, Federal Republic of Brazil**. Below is a list of the specific activities and expected outcomes in areas of mutual interest, in which experts from the *California Environmental Protection Agency - Cal-EPA* and the Secretariat for the Environment of the State of São Paulo - SMA will collaborate:

1. **Air Quality:** the two states recognize that clean air is vital to economic viability and to the health of their inhabitants. São Paulo has adopted a project to clean up its air through a process similar to that of the Federal Clean Air Act in California. Cal-EPA will share its experience with the Secretariat for the Environment of the State of São Paulo - SMA in implementing clean air legislation.
  - 1a. **CAL-EPA** will designate an expert to collaborate with his/her counterparts in São Paulo on the program to ratify the Clean Air Decree, the offset mechanisms to be used, the execution and monitoring of the program and the creation of an emissions offset exchange system with duly trained specialists in offset credits. The expert will make at least one trip to São Paulo.
  - 1b. **The SMA** will provide at least one expert with highly-detailed knowledge of the São Paulo Clean Air Decree. This expert, together with his/her colleagues from the Environmental Quality Enforcement division of the SMA (CETESB), will host a *Cal-EPA* representative and will also visit *Cal-EPA* facilities in California. A joint article may result from the exchange if both parties deem it to be useful.
  - 1c. **Cal-EPA and the SMA** shall discuss the benefits to be gained from opportunities for clean fuels and emissions standards, including the Low-Emission Vehicles Program (LEV). Experts from both agencies will draft an article on the benefits of clean fuels for better air quality.
  - 1d. **Cal-EPA and the SMA** shall discuss the feasibility of using advanced vehicle technologies such as on-board diagnostics (OBD) and remote sensing to detect and control emissions from those vehicles that are the worst polluters in São Paulo.

2. **Greenhouse Gas Emissions and Energy:** the two states have been gaining substantial economic benefits from increased energy efficiency and pollution reduction. The clear economic interest evidenced by past experience stimulates both states to work together and to share methodological approaches and research findings.
  - 2a1. **Alternative Fuels:** The SMA shall provide information on the Brazilian ethanol program, the effects of producing fuel from sugar cane on the state's economy, and current research on biofuels. Cal-EPA, together with the SMA, CETESB and other invited organizations, shall meet to set up a program to exchange information on the gradual introduction of ethanol, be it in flex-fuel vehicles or in gasoline-only vehicles, taking into consideration emissions, technological advances, and vehicle and fuel standards.
  - 2a2. **Mass Transportation Systems:** California shall provide São Paulo with information on mass transport systems, especially in terms of substituting natural gas for diesel fuel and the supplying of diesel fuel with ultra-low sulphur content along dedicated bus lanes. A visit by experts and a report of recommendations shall complement this item.
  - 2a3. **The SMA and Cal-EPA** shall also evaluate the benefits of joint development of specifications for liquid biofuel technology.
  - 2b. **Energy Efficiency:** Cal-EPA and the SMA shall share technology for fuel-efficiency programs, including PROCEL, tax incentives for energy-efficient goods and green labels.
  - 2c. **Renewable Energy Sources:** The SMA and Cal-EPA have solid programs for developing renewable sources of energy. The SMA, together with invited participants, shall propose an initiative for the exchange of information on the co-generation of electricity using solid biomass and on the recovery of methane gas from landfills. The two agencies shall work to share research methodologies and results.
3. **Dedicated Bus Lanes:** In both states, transportation is the principal cause of air pollution. Plans to reduce overall vehicle emissions must include increased use of public transportation. Bus Rapid Transit (BRT) is a mature technology with highly successful systems in operation throughout the Americas and in parts of Asia. BRT was developed in Brazil and São Paulo is home to some of the most innovative BRT designs and specialists. With such vast technological knowledge, São Paulo can share its experience with California.

This being the case, the SMA shall offer – either in São Paulo or in California, a presentation on BRT for California cities. In those cases where *CAL-EPA* identifies cities that are interested and sufficiently suited for BRT technology, the SMA (together with counterparts from the state government, including the Secretariat for Urban Transportation), shall offer technical orientation for the development of integrated bus lane systems. This support shall include:

- 3a. Technical visits to California by two experts from São Paulo.
- 3b. Visits by two local representatives from California to highly-successful BRT projects in São Paulo and
- 3c. Discussion by both parties of system project start-up orientation.
- 4. **Forests:** The two states are home to numerous forested areas that have an important role in carbon sequestration as well as in the preservation of biodiversity. Thus, both the SMA and *Cal-EPA* reaffirm their commitment to protecting these areas. In so far as possible, and together with other relevant agencies (e.g., the *California Resources Agency*), São Paulo and California shall share information and methods for preserving the forest stocks of both states and for recovering deforested areas. The SMA has had recent experience in recovering public parks and restoring deforested areas. The Secretariat shall share its experiences with *Cal-EPA*.
- 5. As a result of their experience and of the proposed technological exchanges, the two states shall explore the possibilities for emissions offset programs through the Clean Development Mechanism set up by the Kyoto Protocol. This effort may be kicked off with a workshop sponsored by the two agencies in order to develop an initial work plan covering:
  - 5a. indicators for emissions and greenhouse gases inventoried in the two states;
  - 5b. carbon reductions expected from the two initiatives discussed earlier.
- 6. The two states shall also consider a short-term educational program focusing on new environmental issues raised by the cooperative agreement.

As a conclusion of this work plan, California and São Paulo shall issue a joint report on the abovementioned issues within 180 days, as of the date this agreement is signed.